OPERATIONAL AND POLICY CONSTRAINTS AFFECTING ROAD TRANSPORT OPERATORS IN TANZANIA

May 2001

For REDSO/ESA's Strategic Objective # 623-002-01:
Increased Use of Critical Information
by USAID and Other Decision-Makers in the Region

Rural and Agricultural Incomes with a Sustainable Environment (RAISE)
IQC No. PCE-I-00-99-00001-00, Task Order 805:
Regional Trade Analytical Agenda
Implemented by TechnoServe-Kenya and ARD

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by

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Finally, despite the overwhelming support I received, I remain solely responsible for any shortcomings in the report.

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ACRONYMS AND ABBREVIATIONS

AfDB	African Development Bank
BOO	Build- Own-Operate
BOT	Build-Operate-Transfer
CTLA	Central Transport Licensing Authority
COMESA	Common Market for Eastern and Southern African Countries
DANIDA	Danish International Development Agency
DSM	Dar es Salaam
EAC	East African Community
ERP	Economic Reform Program
EU	European Union
FY	Fiscal Year
HGV	Heavy Goods Vehicle
IDA	International Development Agency
IRP	Integrated Roads Program
kph	kilometers per hour
KUW	Kuwait Fund for Development
MECCO	Mwananchi Engineering Contracting Company
MCT	Ministry of Communications and Transport
MOW	Ministry of Works
MRALG	Ministry of Regional Administration and Local Government
NEDCO	National Engineering Design Company
NCC	National Construction Council
NTP	National Transport Policy
NORAD	Norwegian Agency for Development
OPEC	Organization of Petroleum Producing Countries
PEHCOL	Plant and Equipment Hire Company Ltd.
PTA	Preferential Trade Area
REO	Regional Engineering Office
RF	Road Fund
RFB	Road Fund Board
RRP	Railway Restructuring Project

RTLA	Regional Transport Licensing Authority
SADC	Southern Africa Development Community
SAUD	Saudi Arabian Fund for Development
TANROADS	Tanzania National Roads Agency
TATOA	Tanzania Truck Operators Association
TANZAM	Tanzania-Zambia
TEU	Twenty-Foot Equivalent Unit
TRA	Tanzania Revenue Authority
TRC	Tanzania Railways Corporation
TTRA	Tanzania Transportation Regulatory Authority
T.shs	Tanzania Shillings
VAT	Value-Added Tax

EXECUTIVE SUMMARY

Introduction

Road transport is the most common mode of transport in Tanzania for both freight and passengers. Currently, Tanzania is an essential outlet to its neighboring landlocked countries for sea access to the international market. As a result, road transportation has become increasingly important for national development and international trade. This study was conducted to determine the challenges facing road transport in the country and to propose approaches that may improve the efficiency of this mode of transport while at the same time recognizing the tremendous achievement that had been realized in the subsector in the past. The report highlights the status of the road transport subsector in Tanzania, various policy and operational constraints facing operators, measures that have been pursued in the past; and makes future policy proposals for addressing the constraints so as to improve the performance of the subsector.

In undertaking this, a comprehensive and in-depth analysis of road transport policy and operational constraints that relate to domestic and transit traffic to and from landlocked countries and other neighboring trading partners was done. The study reviewed the major policy reforms that were initiated in the late 1980s under the Economic Reform Program (ERP) and during the two phases of the Integrated Roads Program (IRP) carried out from 1990 to date.

Road Transport Infrastructure

The road network in Tanzania connects all the major towns and centers in the country. It therefore, provides vital links to the landlocked countries[1] and other neighboring countries with seaports like Mozambique and Kenya. It is estimated that the road infrastructure network consists of over 85,000 km of roads, out of which 10,300 km are trunk roads, 24,700 km are regional roads, and over 50,000 km district roads. Out of the total network, 3,928 km are paved while the rest are unpaved or earth roads. Only 3,830 km of the trunk roads and 98 km of regional roads are paved. Even though most of the trunk roads are in fair condition, most of the regional and district roads are in poor condition.

Over the years, various reforms have been undertaken and substantial investment made by the government in the road transport subsector to improve its efficiency. For instance, in July 1991, a dedicated Road Fund (RF) for road maintenance, rehabilitation, and upgrading was established. One year later, a similar fund was established for roads under the jurisdiction of local authorities. Other reforms were made with respect to the future financing of road maintenance, management and institutional setup, operation, and regulatory framework. Currently, the Ministry of Works (MOW) is responsible for construction, rehabilitation, and maintenance of trunk and regional roads. Until FY 1999-2000, MOW was also responsible for controlling funds earmarked for road maintenance activities. The reforms that started in FY 1999-2000, however, led to the formation of a Road Fund Board (RFB) to manage the resources of the RF. The Tanzania National Roads Agency (TANROADS) was also established during FY 1999-2000 to manage the trunk and regional road construction, rehabilitation and maintenance. This left the MOW with a policy formulation, regulation, and monitoring role.

1 Uganda, Malawi, Zambia, Rwanda, Democratic Republic of Congo, and Burundi.

Other major policy measures that have made drastic improvement in upgrading and rehabilitating the roads include prioritizing investments in the road network, resource mobilization strategy for road maintenance, and market liberalization to manage roads, equipment, and other resources on a commercial basis. These arrangements were considered necessary to provide adequate and a continuous flow of funds for road maintenance and attract private investment in the road infrastructure development in the country.

Freight Transport Services

High competition, low tariffs, medium-sized capacity trucks and relatively high load factor characterizes interregional freight movement. Interregional freight transport services tend to attract trucks with less than seven ton capacity due to poor infrastructure, low load factor, and seasonal availability of cargo. These factors lead to poor utilization of vehicles and high tariffs charged by operators. Transit traffic depends mainly on the performance of the port of Dar-es-Salaam and has the inherent characteristic of larger capacity trucks with economies of scale in operating long haulage routes, high market competition on all routes, low load factor and vehicle utilization as well as low tariffs.

Passenger Transport Services

Passenger transport operators face stiff competition in all routes where roads are in good condition. On the other hand, where roads are in poor shape, operators refrain from providing services. Some services for areas such as Mwanza and Bukoba have to be served through Kenya and Uganda respectively due to poor infrastructure across the Tanzania central region. This leads to high premium fares charged by operators. Although bus passenger services have significantly improved in the last few years and the demand for intercity bus operation increased by five percent a year (mainly due to urban population growth and tourism activities), the intercity services still need a lot of improvement on a countrywide basis. Reliable service is only available where the infrastructure is good, such as the routes between Dar es Salaam and Moshi/Arusha/Nairobi while other towns still face serious transport problems especially during rainy seasons. Buses are also given specific departure time schedules that they often fail to meet due to lack of passengers.

Conclusions

Road transport infrastructure in Tanzania is still in poor condition and unsatisfactory to meet the growing domestic and international transport demand. There is an infrastructure maintenance backlog due to lack of adequate financial resources for road development. Although the overriding constraint relates to lack of effective coordination of institutions involved in regulating the road transport industry, the problem is now being alleviated through the formation of Tanzania Transportation Regulatory Authority (TTRA).

Road transport services in the country are generally characterized by unsatisfactory levels of service delivery manifested by inadequate maintenance, inadequate sustainability, resource constraints and misallocation as well as low levels of technical efficiency. The subsector is

affected by a number of constraints including intermodal inefficiency, poor infrastructure, overloading, poor quality of equipment, insecurity, transit traffic restrictions, application of different transit traffic charges, and stiff market competition. Other constraints affecting the subsector include policy constraints, inadequate interface facilities, and insufficient facilities like inland and dry ports, container freight station and other transfer points that are necessary for the development of an integrated transport system. Insufficient regulatory and institutional structure; shortage of technically qualified human resources; poor management of border posts; poor security of goods leading to pilferage or damage of goods in transit, cumbersome documentation, contribute significantly to inefficiencies in the subsector.

The fuel levy is managed by the RFB and is currently the only source of revenue for the RF. Revenue collected from other sources, such as international transit charges, are collected by the customs department and channeled through the Government Consolidated Revenue Account administered by Ministry of Finance. This revenue is not used for the provision and maintenance of roads.

Like most countries that levy road transit charges, Tanzania requires foreign transport operators to pay road transit charges when entering the country. The operators are required to pay the full amount or prove that this amount has been paid. The charge is normally related to distance traveled on the defined transit routes. However, the mode of payment is cumbersome, as operators are required to pay the charges in cash and in US dollars. This forces drivers to carry large amounts of money in cash for the payment of road transit charges.

The government has taken steps to determine the future priorities in infrastructure development in the country. Phase I of the ten-year infrastructure investment plan study has been concluded and the second phase is under finalization. A comprehensive National Transport Sector Strategic Plan and Transport Infrastructure Master Plan Study has been undertaken for mainland Tanzania. This aims at providing a 20 to 30-year transport development program for the country. Measures have also been taken to cut the smuggling of fuel. Despite these efforts, a number of other policy and operational constraints have emerged from the implementation of the various reforms that are being implemented. These include the slow growth of the economy and its adverse impact on the subsector, poor collection and disbursement of funds from the RF, inefficient utilization and management of investment on infrastructure and noninvolvement of stakeholders on the utilization of RF revenue.

Recommendations

The backlog of infrastructure maintenance and service standards should be addressed and a new approach for funding the road network maintenance and rehabilitation as well as development should be devised given the enormous financial resources that are required. The existing institutional setup should be addressed since the existing ministerial setup is ineffective and the direct management of the road is now the responsibility of TANROADS.

For freight transport, stakeholders should coordinate their activities, especially at border posts and inland clearing depots to facilitate the free flow of transit traffic. The standing instructions for long distance truck operators to seek police escort should be emulated as in Kenya and

Uganda, to address the existing lack of security. The possibility of concessioning weighbridges to the private sector operators should be explored and a uniform axle load limit adapted in the region to prevent the overloading of vehicles. Private sector investment in road infrastructure facilities should be promoted while restrictions to transit traffic and charges should be reviewed and procedures harmonized. The government should also divest from ports and railways to improve their performance.

For passenger transport, the government should develop and upgrade terminal infrastructure and facilities; reduce taxes, especially customs duty and value-added tax (VAT) charged on vehicles; and introduce nondiscriminative and harmonized agreement for foreign bus operators providing services in areas not currently covered due to poor road infrastructure. The government should create an appropriate environment for competition and upgrade infrastructure to ensure that road transport services are provided equitably to towns where the road infrastructure is poor.

There is need to promote trade and investment in the East African region and remove bottlenecks to economic prosperity within the partner states. Harmonization of transport facilitation should be done in the region to enhance transit traffic. Road transit charges should be increased to a level that will cover the damage costs of transit traffic and the elimination of other transit charges as recommended by the study on harmonization of road transit charges undertaken by the East African Community (EAC). This calls for a single charging instrument to administer the collection and management of funds from transit charges and separation in the management of funds collected from domestic road user charges and those collected from transit charges.

It is recommended that all the revenue collected from transit operators and other domestic road user charges should be deposited into the RF to be managed by the RFB that is already in place. This will boost the amount of money collected for road provision and maintenance.

The use of coupons for the payment of road transit charges should be adopted. This will help drivers to avoid carrying large amounts of cash for payment of road transit charges and other ancillary expenses, as well as expose them to highway risks from robbers and possible loss of cash.

It is also recommended that studies on the collection of road transit charges be conducted to determine designated banks in Tanzania that would issue coupons to transit transport operators. The designated bank would remit the collected revenue to an account designated by the government. A simple and robust system of collecting transit charges between the government and the private sector should also be designed.

Finally, a solution to the poor or inadequate infrastructure in the country depends largely on acceleration of the country's economic growth and improving the overall tax collection machinery, particularly for road maintenance and development. It will also depend on a number of factors, including improving collection and disbursement of cash from the RF, improving business practices so that funds spent on infrastructure are efficiently utilized, and managed and improving government transparency and reducing corruption in the courts.

CHAPTER 1
INTRODUCTION

1.1 Overview

Tanzania has a well-distributed road network connecting all the major towns and small town centers in the country. Road transport is the most dominant mode in the country for both freight and passenger transport. The subsector contributes over 70 percent of the total national traffic, while the remaining 30 percent is carried by railways, and coastal and inland water transport. It also provides vital links to the landlocked countries that include Uganda, Malawi, Zambia, Rwanda, Democratic Republic of Congo, and Burundi and other neighboring countries with seaports, like Kenya and Mozambique.

Since July 1991, the government has introduced a number of reform measures to improve the operation, management, and financing of the road transport subsector. A dedicated Road Fund (RF) for road maintenance, rehabilitation, and upgrading of the road network was established in July 1991, and a year later, a similar fund was established for roads under the jurisdiction of local authorities.

Currently, Tanzania is an essential outlet for its neighboring landlocked countries and the provision of a stable sea access to international market to these countries is critical. Also transportation, particularly road transportation for national development and international trade, has become increasingly important due to the improved economic performance of the domestic economy, which has increased in national, regional, and international trade. Moreover, it has been recognized that transport in general and road transport in particular is an essential component for regional integration. Thus the success of regional groupings such as the East African Community (EAC) and Southern Africa Development Community (SADC) depends largely on how the road transport system performs towards strengthening economic linkages in these regional groupings. These developments have necessitated increased reforms and investments in roads and the road transport system for national, regional, and international trade.

This report highlights the current status of the road transport subsector in Tanzania including policy and operational constraints facing operators, various policy reforms, and other measures that have been pursued over the years and future policy proposals. The study investigates and quantifies the results of policy and operational measures on domestic and transit traffic using road transport system. This is done by undertaking in-depth analysis of road transport policy and operational constraints to domestic and transit traffic to and from landlocked countries and other neighboring trading partners. This study is intended to provide the basis for future policy reviews to create efficient and cost effective operations of this mode of transport.

1.2 The Problem

During the last ten years, the performance of the road transport subsector in Tanzania has been unsatisfactory, with many road segments having failed, and an aging truck fleet. However, the amount of traffic handled by the subsector has increased due to inefficiency in the other land transport systems, particularly the poor performance of Tanzania Railways Corporation (TRC). Currently paved roads constitute only five percent of the total road network while only 14

percent of the total road network are in good condition, 25 percent are in fair condition and the remaining 61 percent are in poor condition. Railway transport has recorded low traffic during the same period due to low investment and poor maintenance of locomotives.

A number of measures and policy reforms have been successfully undertaken in the subsector that has improved performance. Despite the tremendous achievements recorded in the past few years, road transport services is characterized by operational delays, decreasing transit traffic and transit insecurity, high vehicle maintenance costs, poor quality of services and terminal facilities, truck overloading, high taxes and duties on transport equipment, market distortions and lack of general facilities.

Additionally, a number of problems have, over the years, been associated with road transport despite continued general improvement undertaken to improve its performance. These include poor infrastructure, intermodal inefficiency, transit traffic restrictions, application of different transit traffic charges, and stiff market competition. The developments in the subsector have generally been influenced by policies undertaken by the government.

The private sector is the main provider of road transport services in the country for both domestic and transit operations. There is a high degree of competition by operators in the market both for freight and passenger services leading to an excess supply of services during low periods of business operations. This has resulted in certain constraints for the provision of services including high operating costs and poor quality services occasioned by the poor infrastructure conditions, particularly in intraregional routes. An inefficient regulatory and inappropriate institutional structure has also been a major constraint to the industry.

There are also economic problems that include high tariff levels, domination of the market by a few major truck operators especially for transit cargo, lack of transit return loads, high road maintenance costs, lack of financial resources for road network improvement as well as bureaucratic customs procedures at border points. In view of the fact that the amount of the road toll collected was shared between maintenance and development projects, the requirements for maintenance works has widened considerably over the years due to inherited backlog. Because of this, a considerable length of the trunk and regional road network actually failed, and inadequate funding led to an increased need for more funds. These factors have adversely affected road transport performance and profitability in the sector. A number of measures have been taken at national and regional level to address these problems. In 1991-1992, the government faced increasing difficulties in financing road maintenance, and introduced a RF to provide the money needed for road maintenance.[2] The legislated RF specifies that all funds collected as road tolls, transit fees, heavy vehicle licenses, vehicle overloading fees, or from any other source at the rate(s) determined by Parliament from time to time be paid to the Fund. Until now, however, the fuel levy is the only source for the Fund.

[2] An amendment was made to the Road Tolls Act, 1985 (Road Tolls [Amendment] No. 2 Act, 1998).

1.3 Objectives of the Study

The study aims to assess the policy and operational constraints affecting the road transport operator and propose measures to alleviate the constraints. Specifically, the study addresses the following objectives:

(i) Review current literature on road transport.
(ii) Quantify international traded goods transported by road (both domestic and transit).
(iii) Annotate the problems that have been observed over time.
(iv) Show how the situation has positively/negatively changed over time through the various policies.
(v) Identify new transit transport policies that should be pursued to enhance the efficiency of this mode of transport.
(vi) Classify the problems according to their source.
(vii) Propose an approach that will address the problems fast among stakeholders and policymakers.

This study was conducted to determine policy and operational factors adversely affecting Tanzanian truck owners, road transport users and policy matters in regulating this industry. It was also intended to propose approaches that may improve the efficiency of road transport in Tanzania while appreciating the achievements that have been realized in the past.

1.4 Methodology

1.4.1 Data Collection

In executing this study, data was obtained primarily from a review of recent studies and publications that have been undertaken on the road transport industry in the country. Interviews with selected firms engaged in trucking and bus service operations including transit routes were conducted. The studies, publications/reports reviewed provided statistical data on domestic and transit traffic. They also provided other useful information on road transport including policy reforms, investment activities, operational set up, funding arrangement and institutional framework. A number of key institutions were also visited, which included the Ministries of Works, Communications and Transport, and Tanzania Harbor Authority.

Additionally, questionnaires were administered to a number of truck and bus operators. These included Halhenge Transport Company Ltd., Kilimanjaro Truck Company, Scandinavia Express Services, Shabaha Bus Services and Royal Coach.

1.4.2 Tackling Each Objective

The steps followed in addressing each of the objectives were as follows:

I. Review the current literature on road transport.

- Comprehensive and detailed literature research and review was carried out.

- Various studies, publications and even reports on roads and road transport in Tanzania and the SADC and EAC regions were reviewed and analyzed. These provided the statistical data on domestic and transit traffic as well as other useful information on road transport including policy reforms, investment activities, operational set up, funding arrangement and institutional framework.

- Books and journals were consulted that provided historical information.

II. Quantify international traded goods traffic transported by road (both domestic and transit).

- Obtained data from studies, publications and reports that provided traded goods transported by road.

- Analyzed the port of Dar es Salaam's cargo throughput transported by road and railway transport.

- Analyzed the transportation of cargo to the landlocked countries served by the Port of Dar es Salaam. This gave the distribution of cargo between road and railways.

III. Annotate the problems that have been observed over time.

- Administered questionnaires to truck and bus operators.

- Reviewed the studies, publications and reports that have highlighted the problems faced.

- Conducted interviews.

IV. Show how the situation has positively/negatively changed over time through various government policy changes.

- Reviewed government policy changes over the years.

- Conducted interviews with truck and bus operators through questionnaires and orally.

- Reviewed publications and reports.

V. Identify new transit transport policies that should be pursued to enhance the efficiency of this mode of transport.

- Reviewed and analyzed the existing transit transport policies in the country, particularly those pertaining to the road transport subsector, and critically analyzed them in order to identify gaps and loopholes that would need to be addressed through new policies.

- The policies were obtained from study documents, government publications and reports as well as reports of regional groupings such as SADC and EAC.

VI. Classify the problems according to their source viz. port policies, police/security issues, infrastructure, tax/customs, etc.

- Identified the problems affecting the road transport subsector and classified them according to their source.

VII. Propose an approach that will address the problems among stakeholders and policymakers.

- Analyzed the various problems identified by the study and made recommendations based on the analysis.

The sources of information listed above provided a basis for analyzing the current position and constraints to efficient performance of the road transport industry and in evolving the proposed measures to alleviate the problems.

1.4.3 Data Analysis and Presentation

After the required data for this study was collected and collated, the data sets were tabulated to compare and establish any existing correlation between them. Thereafter, inferential and descriptive statistics were produced.

1.5 Organization of the Study Report

The report comprises five chapters:

Chapter 1. Introduction

This chapter gives the background to the study as well as its objectives and the methodology used.

Chapter 2. Transport Infrastructure and Facilities

This chapter reviews the existing transport infrastructure in road, rail, maritime, air and inland waterway transport. It gives a detailed overview of the road transport infrastructure in Tanzania and touches on the current status of the road network, institutional improvement, investment, resource mobilization, liberalization and impact of policy reform.

Chapter 3. Road Transport Services

This chapter gives an overview of the freight and passenger transport industry in Tanzania and physical constraints faced.

Chapter 4. Major Policy and Operational Constraints

This chapter identifies the policy and operational constraints facing transport operators in the country and classifies the problems according to their source.

Chapter 5. Findings, Conclusions and Recommendations

This chapter provides a summary of the major findings, conclusions and recommendations of the study.

CHAPTER 2
TRANSPORT INFRASTRUCTURE AND FACILITIES

2.1 Introduction

The transport system in Tanzania is heavily concentrated along the Central Corridor Transport system stretching from the port of Dar es Salaam at the coast to the hinterland countries in the west, northwest and southern parts of the country. The corridor comprises various modes of transport including roads, railways, shipping at the coast with the port of Dar es Salaam as the principal seaport, air transport and pipeline. There are also inland waterways transport on Lake Victoria and Lake Tanganyika. The corridor serves not only Tanzania, but a number of landlocked countries: Uganda, Rwanda, Burundi, Malawi and Zambia.

Over the last decade, the government's policy has been steady deregulation of the transport sector in order to improve its performance. Considerable investment has been made in the sector to improve the existing transport facilities and services in the country. Priority has focused on the maintenance and rehabilitation of the existing infrastructure as well as on the development of new infrastructure. Tremendous achievements have been realized over the years in the sector due to these efforts. However, financial and other resource constraints, inappropriate institutional framework and increasing demand for services and resources in other sectors of the economy have limited government capacity to expand the existing facilities and further mitigate efficient operation.

2.2 Road Infrastructure

The road network in Tanzania consists of over 85,000 km, of which 10,300 km are primary roads, while 24,700 km and slightly over 50,000 km are secondary and tertiary roads respectively. Only about five percent of the road network is paved. Table 2.1 presents the current length and condition of the road network in Tanzania. The table shows that only 14 percent of roads in the country are in good condition, 25 percent in fair condition, and the remaining 61 percent in poor condition. Tarmac roads constitute only about five percent of the network, while 10 percent are gravel and 85 percent are earth roads. Consequently, the bulk of the road network (61 percent) requires rehabilitation and only 39 percent of the network require routine and/or periodic maintenance.

The road network in Tanzania links all levels of socioeconomic activities in the country. However, by the mid-1980s the road network had deteriorated to an extent that it was no longer providing the services it was designed for. This deterioration was mainly due to inadequate allocation of resources for both regular and periodic maintenance and for rehabilitation works, absence of a central effective coordinating authority, cumbersome procurement procedures and outdated laws governing the management of the roads including the lack of a maintenance culture. The average maintenance budget was US $396 per km per year for trunk roads and US $194 per km per year for regional roads, which represented only one-quarter and less than one-sixth of the maintenance requirements for both classes of roads, respectively.

Table 2.1. The Tanzanian Road Network Condition

	Good	Fair	Poor	Total - KM
Trunk Roads				
Paved	2,019 (53%)	1,267 (33%)	544 (14%)	3,830
Unpaved	1,362 (21%)	3,036 (47%)	2,072 (32%)	6,470
Total	3,381 (33%)	4,303 (42%)	2,616 (25%)	10,300
Regional Roads				
Paved	17 (17%)	58 (59%)	23 (24 %)	98
Unpaved	4,507 (18%)	7,458 (30%)	12,637 (52%)	24,602
Total	4,524 (18%)	7,517 (31%)	12,660 (51%)	24,700
District Roads	3,995 (8%)	9,755 (20%)	36,250(72%)	50,000
Total Roads	11,900 (14%)	21,674 (25%)	51,526 (61%)	85,000

Source: Medium-Term Expenditure Framework (MTEF), 1999

2.2.1 Road Infrastructure Administration

In terms of administration of the road network, trunk and regional roads are under the Ministry of Works (MOW) while district, urban and feeder roads fall under Ministry of Regional Administration and Local Governments (MRALG). The MOW is currently responsible for the construction, rehabilitation and maintenance of trunk and regional roads. It is also responsible for the formulation of sectoral policies, strategic planning and management of roads. The role of MRALG includes the preparation of the road maintenance budget for the district, feeder and urban roads under the local governments. At all levels of the sector, there is participation of both the government and donors in the financing of upgrading, rehabilitation and maintenance of roads. There is also participation of the private sector and communities in road maintenance and rehabilitation.

During the beginning of the 2000-2001 fiscal year, the road sector adopted a new structure including the creation of an executive road management agency known as 'TANROADS'[3]. A Road Fund Board (RFB) had been established to manage the resources of the RF. The Board is composed of road users and Government representatives. Under this new arrangement, the involvement of the MOW in the road sector will be limited to policy formulation, strategic planning and management of its agencies. The maintenance, rehabilitation, and upgrading of district, urban, and feeder roads will be under local government authorities. However, the reform of local government entails substantive changes in the flow of resources from the central government to local authorities.

2.2.2 Road Subsector Reforms

By the mid-1980s, the road network had deteriorated due to inadequate allocation of resources for both regular and periodic maintenance and rehabilitation works, absence of a central effective coordinating authority, cumbersome procurement procedures and outdated laws governing the management of the roads including the lack of maintenance culture. In 1986, the Economic Reform Program (ERP) led to major reforms in the subsector, initially through the implementation of the Sixth Highway Project and the subsequent 10-year IRP that began in

[3] TANROADS is responsible for the management of trunk and regional road construction, rehabilitation and maintenance.

1990. The aim of this program was to set a pace for the recovery of the sector as a whole and lay firm groundwork for sustained long-term development. In order to enhance road network development in the country, a four-pronged policy strategy was adopted (discussed in i-iv below).

(i) Investment Strategy

Under this strategy, the government was to give priority to maintenance, rehabilitation and the upgrade of existing infrastructure and facilities rather than new construction except in emergency cases. Funding allocation for roads was to be increased from three to six percent to 20 to 25 percent of total public expenditure with priority given to roads that are essential for transport of agricultural products including support of tourism, mining, transit traffic and other significant economic activities. Due to limited financial resources, investments are to be based on economic criteria determined by weighted priorities.

(ii) Resource Mobilization Strategy

By late 1980s, the average maintenance budget was US $396 per km per year for trunk roads and US $194 per km per year for regional roads, accounting for only one-quarter and less than one-sixth of the maintenance requirements for both classes, respectively. As a result, the road condition deteriorated to such an extent that by 1990-1991 only 14.9 percent of the trunk roads and less than 10 percent of the regional roads were in satisfactory condition, while only 25 percent of the paved roads were in good condition. The policy reform was to address this adverse situation by improving the financing of road maintenance. The reforms focused on financial reform, which led to the establishment of the RF and the formation of the RFB composed of broad-based representation of stakeholders. The Board oversees the collection and management of the fund and disburses 70 percent to MOW/TANROADS and 30 percent to MRALG. By financing road maintenance, the policy strategy makes road users assume ownership rights of the roads and can demand accountability.

(iii) Institutional Improvement Strategy

The existence of a weak and inefficient institutional structure for management of the roads also contributed to the poor state of the road network. TANROADS was established as a road agency under the Executive Agency Act No. 30 of 1997. The agency, a full autonomous arm of the government, draw its funds from the RF and undertakes design, construction, maintenance and management of the trunk and regional network, mainly on contract. It is expected to contract out most of its works to private consultants and contractors while retaining a quality control and supervisory role. In this arrangement, MOW will be responsible for the development of specifications and standards, regulatory and monitoring functions.

(iv) Market Liberalization Strategy

This aims at commercializing activities related to infrastructure development, promotion and encouraging greater participation of the local contractors in rehabilitation and maintenance of roads. The National Construction Council (NCC), in collaboration with professional associations, has been conducting training workshops to improve the skills of local contracting firms in the region, especially small firms. Under this program, the public consulting and engineering contracting companies: National Engineering Design Company (NEDCO), Mwananchi Engineering Contracting Company (MECCO), and Plant and Equipment Hire Company Ltd. (PEHCOL) have been privatized or divested. Currently, a strong private sector partnership in constructing and operating roads, bridges and ferries is being forged through the principle of Build-Operate-Transfer (BOT) or Build-Own-Operate (BOO).

2.2.3 Impact of the Reforms

As a result of the policy reforms that were implemented concurrently with the 10-year IRP Phase I and II, significant improvement in the condition of trunk and regional roads was recorded. Before the start of IRP in 1990, 53 percent of the trunk roads were in poor condition but this improved to 18 percent in the late 1999 and early 2000. Unpaved roads, on the other hand, improved from 59 percent in poor condition to 33 percent during the period. The improvements led to a significant reduction in travel time and vehicle operating costs.

Before the development of the draft National Transport Policy (NTP) in September 2000, the policy strategies coming from the donor-funded ERP and IRP provided the direction for the development of the whole transport sector. The NTP charts out the future sector policy direction aimed at facilitating road transport corridor (nine corridors with a total road network of 10,300 km of which 40 percent is paved) development and bring them to the standard of an all weather bitumen road. For transit routes, the NTP intends to ensure that all roads linking neighboring countries are expanded and improved to facilitate smooth flow of international traffic and subsequent expansion of international trade.

To ensure sustainability of the improvement realized under ERP and IRP, the MOW has completed a Phase I study on a 10-year infrastructure investment plan and the second phase study is in progress. The studies are expected to set infrastructure investment priorities in the country. Also, the Ministry of Communications and Transport (MCT) has commissioned a study on the national transport sector strategic plan and transport infrastructure master plan study to cover the Tanzania mainland. The study will provide long-term optimum development scenarios for the sector and evolve a program that will sustain the gains made under the IRP.

Under the auspices of the EAC, an East African Road Network Development Program was prepared to ensure efficient transport service in the region and the funding requirement was determined. A donor's conference held to elicit funding pledges showed positive results but has not yielded the expected results. The EAC Secretariat is reviewing the funding backlog in the program that amounted to US $1 billion for funding roads in the three partner states. The Secretariat is planning to hold another conference to record progress in implementation of the program and request for renewed pledges. Overloading has decreased from 80 percent to about

20 to 30 percent of trucks at this time. The maximum axle load recorded in 1999 was 28 tons, compared with an allowable 10 tons on a single axle (eight tons on the steering axle). This is due to better awareness, improved enforcement and stiffer fines that are sufficiently high and encourage compliance. A truck that is 30 percent overloaded is fined US $370 and one that is 80 percent overloaded is fined US $1,890.

2.3 Air Transport

Air transport is the major mode of transport for high value exports, perishable goods and tourists. This mode of transport has the potential to enhance the participation of the country in the global air transport system and for promoting regional integration. Tanzania has a number of airports and airstrips under the jurisdiction of Tanzania Civil Aviation Authority, with two international airports: Dar es Salaam International Airport and Kilimanjaro International Airport (near Arusha). There are also a number of major domestic airports handling domestic flights. Low passenger volumes normally recorded in this subsector are due to a weak business climate, poor infrastructure and competitiveness of the economy. In 1998, over 6,000 aircraft departures were recorded, with 220,000 passengers and four million ton-km of freight airlifted. Over the years, efforts have been taken to improve the efficiency of airport equipment and other facilities, improve the quality of airport services and strengthen the institutions involved in the provision of airport services.

Since independence, the government has committed substantial resources for the development of this subsector. There has been tremendous growth in passenger and cargo traffic over the years as well as competitive fares and a rise in the number of air transport operators. Tanzania is a key participant in the International Civil Aviation Authority oversight program and has taken elaborate measures to improve the regulatory framework to cope with the increase in traffic. Tanzania is currently working with the other EAC partner states on the modalities for creating a unified upper airspace in order to improve efficiency and reduce operational costs for the benefit of all concerned parties, including consumers of aviation services in the country. A civil aviation authority has been created to ensure efficient operation and management of the subsector.

2.4 Railway Transport

Railway transport provides a cheap mode of transport for heavy/bulky products over long distances. TRC was established in 1977, after the breakup of the EAC, to provide railway transport services in Tanzania. The railways is one of the country's largest network infrastructure, providing transport of both goods and passenger transport services in the country as well as transit traffic to the landlocked countries of Zambia, Malawi, Democratic Republic of Congo, Burundi, Rwanda and Uganda. The Tanzania railway network is about 2,600 km of single-track meter gauge consisting of two main lines, the Central and the Tanga line. The Central line runs from Dar es Salaam to Tabora (85 km) and with one line from Tabora to Kigoma (453 km) and another to Mwanza (386 km). The Tanga line runs from Tanga to Moshi and Arusha with a total length of 430 km. There is a link line of 186 km between Ruyu Junction Station on the Central line and Mruazi Junction on the Tanga line that connects the two. There are three other branch lines: Kilosa-Kidatu (102 km), Kaliua-Mpanda (212 km) and Manyoni-Singida (115 km). Most of the railway network was built at the beginning of the twentieth

century, while others were built at various times —the most recent being the Sigma-Manyoni line that was built between 1985 and 1997. The network is connected to Uganda rail network by wagon ferries over Lake Victoria and to the Kenya rail network through a link from the Tanga line to the Kenyan rail network at Taveta. The locomotive availability between is only 66 percent and has remained so since 1998.

Over the years, TRC has suffered from stiff competition from the road subsector and from underinvestment and poor maintenance as well as restraints on tariffs. However, there has been significant improvement in the corporation's performance since 1992 when the Railway Restructuring Project (RRP) began. TRC has itself undergone a great deal of restructuring, including the leasing of railway, contracting out catering services and sectioning off and corporatizing marine services. It also entered into a performance contract with the government in 1997. TRC is in the process of being privatized in line with the study conducted in October 1997, which recommended that the private sector should be more involved in railways.

2.5 Maritime Transport

Maritime transport offers a cheap and suitable means of transport for heavy and bulky goods. In Tanzania, maritime transport consists of port facilities at the coast, shipping and inland water transport. Tanzania has a number of seaports, primarily Dar es Salaam, Tanga, and Mtwara. The port of Dar es Salaam is a deepwater port that currently handles all types of ships and cargo and serves not only the country but a number of landlocked countries including Uganda, Rwanda, Burundi, Democratic Republic of Congo, Zambia and Malawi.

Tanzania Harbors Authority, a parastatal currently under reconstruction to improve its efficiency and delivery of services, manages port operations. Inland water transport in Tanzania is largely confined to Lake Victoria and separated from TRC and corporatized. A number of activities have, over the years, been taken to improve port services, while a number of activities are earmarked for implementation. Various reform measures have been successfully implemented leading to improved services, reduction in costs to port users and facilitation of the movement of cargo, especially transit traffic.

Demand for international transport services depends on the amount of cargo handled by the port of Dar es Salaam. However, the port has not been doing well since the opening of the ports of Beira and Nacala in Mozambique and the South African ports that have provided alternative outlets to Malawi and Zambia. With the recent privatization of the Dar es Salaam container terminal and with the other units of the port soon to follow, the port traffic is expected to grow. Appendix C presents the cargo throughput at the three major ports in Tanzania between 1992-1993 and 1998-1999. As indicated in the, appendix the total cargo throughput handled by the three major ports in the country declined from 5,130,975 tons in 1992-1993 to 4,460,902 tons in 1998-1999.

Similarly, Appendix D gives a comparison of the distribution of cargo through the port of Dar es Salaam between 1997-1998 and 1998-1999. There was a significant decline in transit traffic from 1,148,831 tons in 1997-1998 to 1,072,646 tons in 1998-1999. The decrease in transit traffic is mainly, attributed to the steady fall in Zambia's traffic, which has been a major transit user of the

port of Dar es Salaam. Other causes include persistent civil war in the Great Lakes region (Democratic Republic of Congo, Rwanda and Burundi), the poor state of inland transport system (mainly roads and railways), and stiff competition among ports in the region. The appendix gives a summary of transit traffic as follows.

Zambia

During 1998-1999, Zambia's traffic constituted 13.6 percent of the total port throughput having decreased by about 26.4 percent from 756,811 tons in 1997-1998 to 556,874 tons in 1998-1999. Both imports and exports decreased by 27.6 percent and 22.9 percent from 555,122 tons and 201,689 tons in 1997-1998 to 404,551 tons and 155,322 tons in 1998-1999 respectively. The decrease was mainly in general cargo and bulk liquids, declining from 272,491 tons to 203,606 tons and from 484,320 tons to 353,268 tons, respectively.

Containerized traffic decreased from 10,221 twenty-foot equivalent units (TEUs) (carrying 191,144 tons) in 1997-1998 to 7,128 TEUs (carrying 154,990 tons) in 1998-1999. Import containers decreased from 3,301 TEUs (carrying 56,095 tons) in 1997-1998 to 1,699 TEUs (carrying 27,208 tons) in 1998-1999 while export containers decreased from 6,920 TEUs (carrying 140,049 tons) in 1997-1998 to 5,429 TEUs (carrying 127,782 tons) in 1998-1999. In 1998/99, a total of 12,415 tons of Zambia's imports were cleared from the port by rail while 21,925 tons were cleared by road.

Democratic Republic of Congo, Burundi and Rwanda

The traffic handled at the port for these three countries increased by 23.7 percent from 178,767 tons in 1997-1998 to 221,246 tons in 1998-1999. Import cargo, constituting 204,140 tons of general cargo and 1,641 tons of bulk liquid, increased by 30 percent from 158,271 tons in 1997-1998 to 205,781 tons in 1998-1999. Exports however decreased by 24.5 percent from 20,465 tons in 1997-1998 to 15,465 tons in 1998-1999. Regional containerized traffic decreased from 6,680 units carrying 113,993 tons in 1997-1998 to 5,242 units carrying 85,174 tons in 1998-1999. Containerized traffic constituted 4,543 units of import containers carrying 72,107 tons while export containers were 699 units carrying 13,067 tons. During 1998-1999, a total of 117,496 tons of imports were cleared from the port by rail while 101,297 tons of imports were cleared by road.

Malawi

The traffic handled for Malawi increased by 28.3 percent from 101,314 tons in 1997-1998 to 130,004 tons in 1998-1999. Import traffic increased by 28.6 percent from 100,693 tons in 1997-1998 to 129,549 tons in 1998-1999. Exports decreased by 16.6 percent from 621 tons in 1997-1998 to 455 tons in 1998-1999. Containerized traffic decreased from 360 units in 1997-1998 to 260 units in 1998-1999. A total of 1,980 tons of Malawi imports were moved by road during 1998-1999.

Uganda

A total of 94,373 tons of cargo destined for Uganda were handled by the port in 1998-1999 compared to 54,162 tons handled in 1997-1998, an increase of 65 percent. Uganda's imports handled increased by 55.3 percent from 48,903 tons to 75,977 tons while exports increased by 122.7 percent from 8,259 tons in 1997-1998 to 18,396 tons in 1998-1999. A total of 53,483 tons and 10,673 tons of imports were cleared from the port by rail and road respectively.

CHAPTER 3
ROAD TRANSPORT SERVICES

3.1 Introduction

Road transport is recognized as one of the most important means of facilitating movement of people and goods in the country. Moreover, the Tanzanian economy is now dependent on road transport due to the poor condition of other inland transport systems notably railways. Even with the improvement in the performance of TRC as well as the ongoing restructuring of inland waterways transport, road transport services still plays an important and dominant role in the transportation of goods and passengers in the country, accounting for over 70 percent of the freight and passenger transport services. The important role played by this mode of transport is due to its flexibility, accessibility and easy adaptation to changes in the economy. Moreover deregulation of imports and increased public spending on roads has resulted in significant improvement in road network conditions in the country. However, this has increased the level of competition from the private sector in the transport sector and reduced earnings to road transport operators. Transit traffic has also been affected by alternative routings through the ports of Mombasa, Nacala, Beira and Maputo.

3.2 Freight Transport Services

The road freight transport industry in Tanzania can be categorized into three broad market sectors namely interregional, intraregional and international freight.

3.2.1 Interregional Freight

This is the largest market sector accounting for some 75 percent of the total freight demand in the country and comprises the transport of agricultural inputs (from Dar es salaam to the regions), agricultural produce (from regional centers to processing centers and export warehouses) as well as transport of industrial commodities and consumer products. The demand for interregional freight transport has been static for sometime due to the slow growth of the economy and future growth will depend on how fast the economy recovers. Over 95 percent of operators are private companies while public operators (fleets owned by cooperatives and agricultural marketing authorities) account for less than 5 percent. Operators from neighboring countries compete in the market essentially to obtain back hauls.

The conditions of the interregional routes and consignment sizes vary considerably. Although there are a significant number of large capacity trucks (15-30 tons); most trucks are of the two-axle type, with load capacity averaging 10 tons. Load factors are higher with movement in and out of a region averaging 60 to 70 percent. Tariffs have been deregulated and are negotiable depending on road conditions, averages US $0.08 per ton-km. The lower tariff is due to use of larger and more economic vehicles and greater competition between operators.

3.2.2 Intraregional Freight

This market consists of movement of agricultural inputs and produce, industrial commodities and consumer goods within the region. The market is largely seasonal with the peak occurring during

the dry season (July to December) when major crops are harvested and fertilizer and chemicals are needed to prepare farms for planting. The demand for transport falls sharply during the rainy season (January to June).

The road conditions do not allow for larger capacity trucks, which are expensive and beyond the reach of most operators, although they are relatively cheaper to operate in terms of ton-km cost. Most trucks are small, about seven tons and below. Operators with 10 to 15 tons also operate where the roads are in good condition. Most of the private operators also have other businesses outside the transport sector. There are a significant number of driver/owners.

The utilization of vehicles is low — due to seasonal factors and long turnaround times arising from frequent loading and unloading. Although the tonnage moved can be high, sales volumes are low because of the short distances traveled and the erratic and unpredictable climate. Tariffs have been deregulated and are negotiable but still higher than other markets, while load factors are low (as crop haulage is often one-way traffic, resulting in empty back hauls). Tariffs range between US $0.12–0.15 per ton-km.

3.2.3 International Freight

The international market accounts for about 20 percent of the total demand for freight transport services in terms of ton-km. It consists primarily of transit traffic to and from Dar es Salaam and neighboring countries. There is also trade traffic but the volume of direct trade between Tanzania and her neighbors is still relatively low. Road conditions for most routes (except part of the central corridor) are in fair condition and consignment sizes are large, resulting in the use of high capacity trucks (40 tones and above) that offer lower operating costs per ton-km. There is an increased supply of trucks relative to demand. This is due to the entry of new companies in the market through the acquisition of secondhand, high capacity trucks. On the other hand, the port of Dar es Salaam is losing traffic destined for Rwanda and Burundi to the port of Mombasa while Malawi and Zambia are increasingly using the Beira port. Transit cargo to neighboring countries include import/export cargo, international relief cargo and local export cargo through the port of Dar es Salaam. The civil strife in Rwanda, Burundi and the Democratic Republic of Congo has increased the demand for such commodities as food, medicine and building materials. These commodities have, in recent years, continued to be the main source of business for the operators. Another source of cargo has been local exports of hardware products including cement traded between Tanzania and the landlocked countries.

Fleet sizes tend to be medium or large in order to cope with the demand for multiple truckload traffic and to take advantage of economies of scale and overheads. These costs can be absorbed at lower unit costs as the fleet size increases. Although there are a few larger companies with fleets of about 50 trucks, the typical company has between 10 and 30 trucks.

The international transport service is overwhelmingly in the hands of the private sector because of the high initial capital outlay required. Currently, there are about 50 companies operating in this market with a fleet of about 300-500 trucks. Replacement of old vehicles has been very slow, averaging less than 100 new vehicles of over 15-ton capacity due to the high costs.

Performance in the international arena depends largely on the ability to win contracts from international clearing and forwarding agents. Due to the stiff market competition and economies of scale, vehicle tariffs, particularly for semi-trailer and truck and trailer units, are quite fixed with very limited allowance for negotiation. However, tariffs are at times influenced by the possibility of obtaining return loads. Table 3.1 presents the cost of carrying the two types of containers to the various major destinations in the region that are currently served by Tanzanian truck operators.

Table 3.1: Cost of Carrying 20' and 40' Containers

Route	20' (US$)	40' (US$)
Dar es Salaam – Lusaka	1,500	2,500
Dar es Salaam– Bujumbura	2,250 – 2,700	4,500 – 5,400
Dar es Salaam– Kigali	1,800 – 2,610	3,600 – 5,220
Dar es Salaam– Lilongwe	4,200	4,200
Dar es Salaam– Kampala	1,050 – 1,950	2,100 – 3,900

The table shows that the cost of 40-foot equivalent containers is double the cost of TEUs in most routes. However, the cost of carrying the two types of containers is the same for the Lilongwe route, due to economies of scale enjoyed by large trucks in the long distance covered.

3.2.4 Truck and Trailer Cost

Truck operators are free to purchase vehicles from the various motor dealers in the country. The most popular makes are Scania, Leyland DAF, IVECO, Mercedes Benz and Volvo. As a matter of policy, there is a need to assess the performance and suitability of vehicle types to enable operators make the best possible choice with respect to vehicle model. The high costs of a new vehicle inclusive of duty and VAT, among other factors, impacts negatively on the operators' ability to replace their fleet. For instance, a typical six-axle prime mover and trailer combination (22 wheels), conforming to the axle load limits in the country, costs between US $140,000–150,000 as a complete build-up unit. The effective tax is 44 percent. This excludes the 10 percent customs duty and 20 percent VAT.

Despite the existence of many banks and other financial institutions in the country, credit facilities for the purchase of new vehicles — particularly for the single truck owner — are very limited. Banks and other financial institutions always require collateral to guarantee payment, especially land or a house in urban areas. Interest charges are prohibitively high, estimated at over 20 percent. Moreover, most banks prefer lending on a short-term basis of three to five years or less. Due to these reasons, there has been a major influx of secondhand vehicles, mostly imported from Middle East countries, UK, Netherlands and Denmark.

3.2.5 Analysis of Truck Performance

Studies indicate that the average age of 40 percent of all vehicles in the country exceeds 12 years, while 50 percent range from one to eleven years. The average vehicle utilization in Tanzania is between 70 to 80 percent for interregional transport and about 60 percent for transit traffic. Table 3.2 provides a summary of expected annual truck performances in a year.

Table 3.2: A Summary of Expected Annual Truck Performance

Type of Truck	Operating Hours	Average cost of crewmembers		Kilometer Traveled (km)		Average Annual Speed		
		Drivers	Turn Boy	Tarmac Roads	Gravel Roads	Earth	Gravel	Paved
Light	2200	60,000/-	30,000/-	34,000	26,000	30	50	80
Medium	2700	70,000/-	35,000/-	70,000	30,000	25	50	80
Heavy	2300	100,000/-	50,000/-	60,000	30,000	20	60	60

Source: Survey Data 2000.

The table shows that tucks travel longer distances on tarmac roads than on gravel roads, with medium and heavy vehicles traveling double the distance they cover on gravel roads. However, medium and heavy vehicles travel longer distances in a year than light trucks. This is largely due to the fact that they are more economical to operate over long distances. Medium-sized trucks operate longer hours in a year on average than the other types of vehicles. The table also shows that light vehicles have a higher average speed on earth and paved roads while heavy goods vehicles (HGVs) have a higher average annual speed on gravel roads. The average monthly salary of a driver is TSh. 100,000 and for turn boys is TSh. 50,000. Although the average monthly salaries for turn boys does not deviate much among the three kinds of vehicles, the monthly allowance depends largely on the type of vehicle and distance covered.

Field surveys also indicate that, on average, drivers of HGVs make only one trip in a month while buses make ten trips. Buses have regular schedules while truck operators rely on the availability of cargo. The limited number of trips for HGVs is mainly attributed to inadequate freight as well as longer transit time.

3.3 Passenger Transport Services

Under the ERP and IRP reforms, there has been a dominant role played by the private sector in providing passenger road transport services in the country. This was a major shift from past practices whereby government parastatals provided these services. Improvements in road infrastructure, deregulation of tariffs, removal of restrictions in the importation of motor vehicles and the elimination of entry barriers have provided an incentive for private sector involvement in the market. Bus operations in the country is controlled by the Central Transport Licensing Authority (CTLA) and Regional Transport Licensing Authority (RTLA) which issues carrier licenses for passenger transport operations, specifying the routes and timetables given by operators. Foreign vehicles are granted special licenses that do not allow them to carry passengers on the domestic routes. There are about 12,000 commercial passenger vehicles in the country, out of which about 40 percent are the 26- to 65-seater buses. Only between 300 and 400

buses operate on the long distance intercity routes while the rest are operating in the urban and peri-urban routes.

Like freight transport, single bus owner operators dominate passenger transport. There is a tendency for the operators to move in and out of business due to stiff competition in the market and freedom of entry and exit. A list of operators and routes is provided in Appendix B. Field surveys reveal that there is a bus oversupply in the market by about 40 percent, while the average annual bus occupancy levels is only between 50 to 60 percent for ordinary buses and 20 to 40 percent for luxury buses during low and peak periods.

Currently, the procurement cost of buses is quite high. The cost of a Scania bus with basic specification requirements averages T.Shs.135,000 million, inclusive of taxes. For luxury specifications with a toilet, air conditioning and carpets, the cost is T.Shs. 250,000 million. The main reason for the high cost of buses is the high element of taxation embodied in the total cost of bus chassis and bodybuilding. Table 3.3 provides the estimated cost of buses in the country.

Table 3.3: Estimated Cost of Buses

Type	Capacity (tons)	Ex-Stock Prices US$	Taxes US$	Total US$
Scania Bus chassis	10	96,600	41,400	138,000
Nissan Bus Chassis	10	56,250	26,875	73,125
Body Building Cost (Ordinary)	65 (Seater)	36,000	7,200	43,200
Body Building Cost (Luxury)	48 (Seater)	49,000	9,920	59,520

Source: Survey data, 2000

The table shows that while the ex-stock prices of buses are reasonable, the taxes imposed are exorbitant, making most procurement of buses to be on a credit basis or alternatively going for secondhand. However, failure to comply with the terms of the credit usually means that the bus would be impounded and auctioned and this accordingly creates an opportunity for another operator to enter the market.

A summary of daily frequency pattern of buses for the major destinations from Dar es Salaam city is given in Appendix E. As indicated earlier, daily bus frequency levels for most routes are high, reflecting the competitive market that exists for most routes with the exception of cross-border operations. Moreover, passenger fares for long distance travel are currently market-determined rates. In any given route, the fares charged depend on the classes of bus services. Luxury or princes' class charge higher fares than the ordinary classes. A sample of passenger fares for different routes are given in Appendix F. It should be observed, however, that these fares are for the normal period of demand. In case of peak period season, say the Christmas season, ordinary bus fares increase by up to 100 percent for some routes. Luxury buses, which demand pre-booking for peak periods, have stable fares. Among the major problems faced by bus operators, are the high operating costs such as fuel and tires and the mobility to adjust fares accordingly due to the tight market competition. As a way of reducing the level of road accidents, the government imposed restrictions on bus traveling speeds to a maximum of 80 km per hour. All buses are required to install speed governors and comply with the official bus operating hours, 5:00 a.m. to 10.00 p.m.

3.4 Traffic Regulation and Licensing

Transport operations in the domestic and transit routes are subject to traffic regulation under the 1973 Traffic Act as amended. These control operations and use of vehicles set standards for operators. According to the Act, each operator is required to have an operating license issued annually by the CTLA. The conditions placed on license applicants are minimal and do not contain financial standing or professional competence, except a vehicle inspection report to confirm roadworthiness of the applicant's vehicle. Licenses for freight transport operations specify the region or regions in which vehicles may operate as requested, and operators are required to comply with the conditions of their licenses. Operators wishing to trade solely within their region or in up to four regions are licensed locally by the RTLA, while countrywide licenses are issued centrally by the CTLA in Dar es Salaam.

In addition to having an annual transport license, operators on the transit routes are required to have a transit goods license issued by the customs commission. The cost of a transit goods license ranges from TShs.400,000 for a unit truck to TShs. 800,000 for a truck and trailer. Most operators choose route licenses that enable them to operate countrywide and common route destinations invariably depend on the availability of cargo. Exceptions to this occur where there are contract loads, such as cement with return loads such as gypsum, also supplied on contract.

3.5 User Charges

Various road user charges for foreign vehicles entering Tanzania at the border posts include foreign vehicle permits for private noncommercial vehicles, commercial vehicles, passenger vehicles and light commercial goods vehicles up to three tons. The fee for these permits is US $60 per entry for a permit valid for 90 days, provided the vehicle remains within Tanzania during that period. If the vehicle remains in the country for over three months, the permit should be renewed by application to the Permanent Secretary Ministry of Finance through the Commissioner for VAT. The operator has to pay a fee of US $160 per vehicle per entry if the permit is valid for one year.

In addition to the foreign vehicle permits, all passenger vehicles (commercial and noncommercial) are required to have road toll tickets for entry into Tanzania. The charge per entry for saloon cars is US $1 and US $3 per entry for other passenger vehicles.

Tanzania has charged rates of US $6 per100 km for three-axle or less trucks and US $16 per 100 km for HGVs of more than three axles. However, unlike other Preferential Trade Area (PTA)/SADC member states, Tanzania has not imposed transit toll charges on buses. For both the trucks with three axles or less and HGVs with more than three axles, the current transit charge falls below the pavement damage cost by 100 percent and 12.5 percent, respectively.

3.5.1 Collection of User Charges

RF revenue is collected at the source from major oil importing companies, by the Tanzania Revenue Authority (TRA) and passed on to Ministry of Finance which deposits it into the respective RF accounts of the MOW and MRALG in a 70:30 ratio. After receipt of the money,

the MOW and MRALG later disburse the funds, in full, to the two implementing units, the Regional Engineering Office (REO) and the district and urban councils.

Table 3.4 presents the current transit charges in Tanzania and COMESA, and the proposed road transit charges in Tanzania.

Table 3.4: Comparison of Calculated Damage Costs with the Current Transit Charges (US$/100 km)

Charges	Buses	Trucks <= 3 Axles	HGVs > 3 Axles
Current Transit Charges	-	6	16
Calculated pavement Damage Costs	6.74	12.48	17.89
Current COMESA Transit Charges	5	6	10
Proposed Pavement Damage Costs	7	12	18

Source: EAC Secretariat, February 2000.

The table shows that against the underlying principle of attempting to recover full pavement damage costs attributable to the passage of transit traffic, the current road user charges for both transit and domestic road user charges needs to be reviewed. Both local and foreign vehicles should also pay in compliance to the agreed system of nondiscrimination of local or foreign traffic in the recovery of full pavement damage costs attributable to any vehicle type. The proposed road transit charges are higher than the current charges as well as the current Common Market for Eastern and Southern African Countries (COMESA) transit charges. The higher charges will attempt to recover the full pavement damage cost attributable to the passage of transit traffic in the country. The three EAC partner states have identified and recommended road transit charges derived from the pavement damage costs for the three identified vehicle categories and the subsequent costs of maintenance of the road infrastructure. These are given as the proposed rates in the table.

Tanzania is currently applying the revenues of fuel taxes on her domestic vehicles for cost recovery and general fiscal purposes with the revenue collected from fuel levies financing the road maintenance activities. The revenue from other sources — like fees on transport licensing, road licenses, customs, excise duties on imported items — is collected and deposited in Ministry of Finance's accounts. To recover full pavement for damage costs and to avoid discrimination between charges on domestic and foreign vehicles, the road user charges should be equal to the pavement damage costs. Furthermore, the transit toll charges for commercial foreign HGVs entering Tanzania is related to the distance traveled on the transit routes, while the fees for foreign vehicle permits and annual transit vehicle license fees are not.

CHAPTER 4
MAJOR POLICY AND OPERATIONAL CONSTRAINTS

4.1 Introduction

This chapter documents the various policy and operational constraints that hinder the development of road transport services in the country. It also highlights some of the ongoing and proposed measures for alleviating these constraints.

4.2 Policy Constraints

Policy constraints for the provision of road transport includes inadequate interface facilities, insufficient facilities such as inland and dry ports, container freight stations and other transfer points necessary for the development of integrated transport services. Other constraints include insufficient regulatory and institutional structures, shortage of technically qualified human resources, disregard for road traffic regulation enforcement and observance; boarder post management, poor security of goods causing pilferage or damage, cumbersome documentation etc. Elimination of these impediments to free and faster movement of goods, persons and services along the transit routes is critical for international trade growth.

4.2.1 Infrastructure

Road transport infrastructure in Tanzania is still in relatively poor condition and is in an unsatisfactory state (particularly on the central corridor) to cater for the growing domestic and international transport demand. Lack of financial resources has led to a backlog of infrastructure projects. There is also a weak institutional set-up due to several ministries being responsible for various modes of transport in the country.

4.2.2 Freight Transport

The main challenge is to ensure that the nine identified corridors under the road corridor development program are accessible year-round. The nine corridors are:

- Tanzania-Zambia (TANZAM) Corridor: comprising a 10,300-km road network (only 40 percent is bituminized)
- Northeast Corridor: Dar es Salaam – Tanga – Arusha – Namanga – 950 km
- Southern Coastal Corridor: Dar es salaam-Lindi-Mtwara-508 km
- Central Corridor: from Morogoro on TANZAM- Dodoma- Mwanza (on Lake Corridor) – Rusumo (Rwanda Border) and Kobero (Burundi border) in the west – 1,584 km
- Lake Circuit: Sirari to Musoma, Mwanza-Bukoba and Mutukula to the border with Uganda – 1,019 km
- Southern Corridor: Lindi-Mtwara-Songea linking to Makombako on the TANZAM and Mbamba Bay on Lake Nyasa – 1,326 km
- Great North Corridor: extending from Iringa on TANZAM corridor to Arusha – Namanga – 1,024 km

- Western Corrido:r from Tunduma on the TANZAM Corridor to Sumbawanga – Mpanda – Uvinza – Kigoma – Nyakanazi and Nyakahura on the Lake Circuit
- Mid-West Corridor: extending from the Central Corridor in the east to the TANZAM Corridor in the southwest

The challenge is to bituminize these corridors. For instance, measures are being taken to bituminize the remaining 60 percent of the TANZAM Corridor.

4.2.3 Passenger Transport

The quality of bus service and terminal facilities is generally unsatisfactory. Bus financing is fully undertaken by private sector operators but the small operators currently experience serious financial constraints, as financiers do not normally accept collateral of vehicles for commercial loans. Although road passenger bus services have generally improved over the years, the intercity services still need a lot of improvement on a countrywide basis. Reliable service is only available where the infrastructure is good especially between Dar es Salaam and Moshi/Arusha/Nairobi while other towns still face serious transport problems, especially during rainy seasons.

4.3 Operational Constraints

The operational constraints relate to infrastructure, freight and passenger transport services.

4.3.1 Infrastructure

The road network is still underfunded with less than six percent of the total government budget allocated to the road subsector spent on road maintenance. With about one million square km in surface area, only less than 4,000 km of the main trunk road is paved. Tanzania spends half as much as other African countries with the same level of economic development for its road infrastructure. There is also a great deal of dependence on donor financing for road improvement and construction, which at times can be held up when tied to fiscal policy conditions.

Another related operational constraint is the lack of policy and regulatory framework enabling increased private sector participation in the subsector. Private funding of road investments in terms of BOT and other similar schemes may be difficult at this stage due to high project and country risks and low traffic volumes. Based on the preliminary survey results of Louise Burger Group Inc., the total vehicle kilometers on the trunk road network is about 800 million a year while the average daily traffic on the surveyed 9,590 km of trunk road is about 140 vehicles.

4.3.2 Freight Transport

Basic operational constraints affecting road freight transport include:

Intermodal Inefficiency

Delays arise from port/road/rail interchanges with regard to freight bookings, settling of relevant charges, documentation, customs control, slow transit to upcountry stations or border points,

cargo security, clearance at destination, among others. Also movement of crews across borders involves immigration, customs and health certification procedures that are bureaucratic and thereby delay border crossings.

Poor Infrastructure

Poor quality of road infrastructure increases the cost of operations, leading to reduced travel speed and time and causes rapid wear and tear. In particular, gravel and earth roads make road transit slow, costly and insecure. Moreover, old and low capacity road interchanges (ferries) on some rivers add to the transit delays. Bad roads can also lead to highway robberies because trucks are forced to move at low speeds, occasioning loss of cash and goods and sometimes causing injuries to the crew.

Overloading and Axle Load Control

Overloading by operators and lack of axle load control has caused damage to the road transport infrastructure. Even though weighbridges have been installed on all major trunk roads in the country, enforcement of the axle load limits has been problematic due to lack of adequately trained operators and low ethical values and standards by the weighbridge personnel. Due to this, rent-seeking behavior among the weighbridge personnel (including traffic police) is common. Weighbridge operators and the police often demand under the table payments of up to US $40.00 per weighbridge, allegedly for overloading when this may not be the case. Similarly, deliberate and inconsistent levying of fines that are intended to compel drivers to negotiate payment of illegitimate fines is increasing. Sometimes different weighbridges record different weights for the same load thus inconveniencing drivers. Also axle load restrictions and charges for transit traffic differ from one country to another, creating problems for the drivers in coping with the variations.

Poor Quality of Equipment Operated

The type, quality and level of technology of the equipment used in the transport sector are vital for the efficient handling of freight. The absence of adequate inland container handling facilities for both road and rail transport, coupled with poor information systems has led to most containerized cargo being unloaded at ports. Only a few containers move by road, most of them are moved by side loaders or on makeshift equipment.

Insecurity

Insecurity arises from poor roads and the lack of traffic escort, as in the case of Kenya and Uganda.

Transit Traffic Restrictions

The COMESA–PTA agreement requires that vehicles registered in any of the member states can carry transit cargo but not local cargo in a country where the trucks are not registered. This discriminatory practice leads to a loss of return cargo for the operator. This is because COMESA

transit charges are not in harmony with the SADC charges and some countries, Tanzania included, have decided to comply with none of the charges from the two blocks.

Application of Different Transit Traffic Charges

Currently, some countries in the East African and Southern African region apply different transit traffic charges, as they have not complied with the regional requirement to have uniform charges for transit traffic.

Stiff Market Competition

Road transporters compete with the other modes of transport for cargo, particularly with the railways. Within this mode there are also many competing operators. This has led to low utilization of vehicles and a low load factor. Despite this constraint, the market competition has tended to stabilize tariffs for the benefit of the users.

4.3.3 Passenger Transport Services

The main operational constraint facing passenger transport services includes stiff competition among operators. Passenger transport businesses are competitive in all destinations. Buses are given specific departure time schedules and when they are unable to obtain enough passengers for a journey they opt to cancel the trip. This is inconvenient to the would-be passengers. Operations are also affected by poor road infrastructure. For instance, a number of routes, such as Dar es Salaam to Mwanza or Bukoba have serious infrastructure deficiencies compelling buses not to capture traffic to these areas and preferring to divert routes out of the country's border through Kenya or Uganda. Strict daytime operation for buses and the 80-kph speed limit are in force in the country.

CHAPTER 5
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

This study has reviewed the past and present state of policy reforms and the performance of the road transport industry in Tanzania, including its inherent policy and operational constraints. The existing numerous policy and operational problems are a major setback for the efficient operation of the subsector and have negatively affected the development of this mode of transport in the country for quite some time. The government's policies have allowed for competition in the transport sector in the country and as TRC has not been well equipped to deal with such competition, there has been an increasing shift in traffic to the road subsector.

Although the study has made some recommendations that would go a long way in addressing the above problems, it is worthwhile to note that the preparation of the draft National Transport Policy (NTP) by the MCT will soon be considered for approval by the government and has adequately addressed these set backs. A strategic time-bound action plan for the operationalization of the NTP document is timely and a welcome proposition for the future growth of the road transport sector in the country, both in qualitative and quantitative terms.

These should be possible through the inputs expected from the ongoing 10-year infrastructure studies, the National Transport Sector Strategic Plan and the Transport Infrastructure Master Plan Study for mainland Tanzania. These are being carried out under the auspices of MOW and MCT. These timely initiatives should help shape the future road transport industry in Tanzania for the better.

The overriding constraint is a lack of effective coordination between numerous institutions that are involved in regulating the road transport industry. These include the safety units of MOW and Ministry of Home Affairs for regulating safety, MCT through CLTA and RTLA for licensing of vehicles, TRA for vehicle registration, etc. This constraint shall, to a large extent, be resolved through the formation of the Tanzania Transportation Regulatory Authority (TTRA) in April 2001.

Since this new body is expected to be a multimodal sector regulator for air, maritime, railways, ports and road transportation in an all embracing basis, it should provide the necessary efficiencies required to improve transit traffic, particularly because it will be well positioned to handle the intermodal regulatory functions more effectively.

Tanzania requires transport operators to pay road transit charges when entering the country. Foreign operators are required to pay the full amount or prove that this amount has been paid upon entering into the country. The charge is normally related to distance traveled on the defined transit routes. The basic principle is that Tanzania has to collect the charges without requiring reimbursement procedures and intercountry auditing of such procedures. Currently, the Commissioner for VAT in the TRA is responsible for controlling, verifying and auditing its procedures of collecting the transit charges.

Overloading has decreased during the last decade from 80 percent of truck in 1991 to about 20 to 23 percent at the present time. The maximum axle load recorded in 1999 was 28 tons compared with allowable 10 tons on a single axle (8 tons on the steering axle). This is attributed to better awareness, improved enforcement and stiffer fines that are sufficiently high to enforce compliance. A truck that is 30 percent overloaded is fined US$ 370 and one that is 80 percent overloaded is fined US $1,890. This notwithstanding however, overloading is still a serious problem since about 60 percent of road renewal costs in the country are spent on repairing damage caused by overloading.

Although the imposition of daytime operation on buses is practiced in Tanzania (unlike in the neighboring countries), it has not reduced accidents in the country. Speed limiters at 80 kph on good roads have not been effective and may be questionable on routes where the road is not good. According to some vehicle manufactures, this speed limit is a problem for vehicle engine output efficiency.

The agreements that established the commission for EAC identified various areas of cooperation in the road transport subsector. These call for harmonization and rationalization of various tariffs and operational procedures in the East African region in order to promote trade and investment and remove bottlenecks to the promotion of economic prosperity within the partner states. During the East African road network review meeting with donors held in Arusha on April 26, 1999, it was agreed that there was a need to harmonize transport facilitation in the region to enhance transit traffic. These were to include road user charges and documentation. The study on harmonization of road transit charges undertaken by the EAC has recommended an increase of road transit charges to a level that will cover the damage costs of transit traffic and the elimination of other transit charges.

The current practice of levying road user charges collected from HGVs at the point of entry (i.e., border posts) by custom officers indicates revenues are channeled through the government consolidated revenue account administered by the Ministry of Finance, who consequently is not using this revenue for the provision and maintenance of roads. Apart from the problems affecting the integrity of revenue collection, the operators of road haulers are adversely affected by drivers having to carry large amounts of money in cash for the payment of road transit charges and other ancillary expenses. This further exposes the drivers to risks from highway robbers and possible loss of cash. Drivers are given a fixed amount to pay road transit charges for a specified journey. Operators who obtain cargo to a different destination while the truck is outside its home base face difficulties and are encouraged to send additional cash to their drivers.

5.2 Conclusions

Road transport services in Tanzania face numerous challenges and do not meet the needs of its users as well as the onerous demand placed on it by the rest of the economy. This mode of transport is characterized by international inefficiencies, insecurity, poor road conditions, poor infrastructure, overloading, poor quality of equipment used, transit traffic restrictions, nonharmonized transit charges and stiff market competition among operators.

The road transport subsector also faces a number of constraints including lack of financial resources due to underfunding, inappropriate institutional setup, as well as policy and operational constraints. There are inadequate interface facilities for the development of integrated transport services, insecurity has led to pilferage and damage to goods. Overloading and disregard to road traffic regulation enforcement and observance are serious problems in the country since about 60 percent of road renewal costs are due to damage caused by overloading. Countries in the region apply different transit traffic regulation and charges; terminal facilities are poor while vehicles are charged high taxes. There is an inappropriate environment for competition — an unfriendly mode of payment for road transit charges and a lack of an integrated transport system in the country.

The government has taken a number of measures to alleviate these constraints in order to improve the performance of the subsector. The MOW and MCT have taken steps to determine the future priorities in infrastructure development in the country. The former has completed Phase I of the ten-year infrastructure investment plan study and Phase II is currently under finalization. The latter is undertaking a comprehensive National Transport Sector Strategic Plan and Transport Infrastructure Master Plan Study in two phases for mainland Tanzania aimed at providing a development program for the next 20 to 30 year period. The efficacy of these plans has not been discussed. In addition, Tanzania has not ratified the Tripartite Agreement on Road Transport that seeks to facilitate road transport in the East African region. These conclusions form the basis of our recommendations.

5.3 Recommendations

The backlog of infrastructure maintenance and service standards needs to be addressed. Since the available resources are unable to meet all expenditure requirements, there is a need for a phased approach in addressing the funding requirements for road network maintenance/rehabilitation and development needs.

The fuel levy is the only source of revenue for the RF. However, there is other revenue collected from sources such as the domestic road user (other than toll) and international transit charges. These charges could be deposited into the RF. It is recommended that the revenue collected from transit operators and other domestic road user charges are deposited into the RF to be managed by the RFB, which is already in place. This method of collecting road user charges will guarantee the availability of funds required for road provision and maintenance. Also the RF from the fuel levy currently represents only about 25 percent of the total fuel tax collected. Hence additional funds could be made available from the government for road improvement and upgrading. Reduced fuel smuggling would equally further fuel tax revenue.

With the institutional coordination, the present dual ministerial setup that controls the transport system cannot be effective. There is a need to merge the MOW and MCT. This is necessary particularly now that the MOW is no longer responsible for direct management of the roads that have been turned over to TANROADS.

There is also a need for the various stakeholders responsible for ports, customs, railways and roads to coordinate their activities, especially in the border posts operations and inland clearing

deports to facilitate the free flow of transit traffic and eliminate the problem of international inefficiencies. The MCT should coordinate these in collaboration with the professional associations and other pressure groups.

Divestiture of port and railway operations should be promoted in the country in order to improve their performance. Already the government has taken a welcome step to concession the container terminal at the Dar es Salaam port. The first year of operation has shown positive results. The concessioning of the other 12 business units of the port (including the other 10 berths) is expected to take place shortly. The study to concession the TRC is currently underway. These measures should be expedited to improve operations of these two transport modes.

Insecurity due to poor road infrastructure should be addressed urgently. Although police enforcers know the traffic insecurity, they counter the concerns of the operators by noting that there are standing instructions for long distance truck operators that haulers seek police escort but this has not been practiced. Whereas in Kenya and Uganda this is being done, Tanzania has not followed suit. There is a need for the Tanzania Truck Operators Association (TATOA) to meet and address this common problem in order to advise the law enforcement authorities of an appropriate course of action to take in minimizing the problem.

For overloading and axle load control, TANROADS (an executive agency responsible for operations and supervision of the weighbridges) should look into the possibility of concessioning the weighbridges to the private sector operators. It is equally imperative that the region adapts a uniform harmonization of permissible axle mass loads and gross vehicle mass limits and a uniform fine structure for overloading and axle load control defaulters. Addressing the problem of poor equipment quality — the government should promote greater private sector investment in new equipment.

Members of COMESA should review restrictions with respect to transit traffic and transit charges and harmonize procedures. The EAC partner states have commissioned a study to harmonize transit charges recommended by the study. Harmonization of these charges and procedures to facilitate the movement of transit traffic is necessary. Tanzania should also impose a transit toll charge on buses of more than 25 seats. This vehicle category is considered to be a “Heavy vehicle category”.

Whereas the private operators will take charge virtually of all passenger transport service requirements in the country in a competitive environment, the government should develop and upgrade terminal infrastructure and facilities. The quality of passenger transport services has a direct bearing on the level of improvement of roads since good roads shorten travel time and reduce operating costs. Hence operators, through their own association, should form pressure groups to influence resource allocation toward improvement of the roads, including the terminal facilities.

The government should also consider reducing taxes, especially customs duty and VAT charged on vehicles to help reduce the cost of buses. The financial institutions should also be encouraged to provide specific financial schemes that would be favorable to bus operators in their fleet replacement and expansion program. Moreover a nondiscriminative and harmonized agreement

should be introduced for foreign bus operators providing services in areas that they are not operating due to poor road infrastructure.

There is also a need to create an appropriate environment for competition, which is dependant upon proper regulation while infrastructure should be upgraded to ensure that road transport services are provide equitably to towns where the road infrastructure is poor. There seems to be no clear-cut solution to the problem of excessive market competition between operators except to let the market forces regulate the business itself.

At the regional level, a number of areas have been identified to ease movement of vehicles within the region. Some of the activities that have been identified for action include upgrade and rehabilitation of roads, free movement of vehicles by adopting COMESA standards on motor vehicle movements, removal of police road blocks/checks (except those established for temporary security measures), and the study and prioritization of regional roads to seek funding for their rehabilitation or construction. In this regard, a number of regional road projects have been identified for implementation to facilitate road transport services in the East African region. Appendix G provides the EAC regional road network for Tanzania.

Due to the problems encountered in collection of road transit charges, instruments for the collection of revenues should be simple and not cause unnecessary delays to HGVs. There should be a single charging instrument to administer the collection and management of funds from transit charges and separation in the management of funds collected from domestic road user charges and those collected from transit charges. It is being recommended that the use of coupons for the payment of road transit charges be adopted. The use of coupons will save drivers from carrying large amounts of cash for the payment of road transit charges and other ancillary expenses as well as protect them from highway risks from robbers and possible loss of their cash and give them operational flexibility.

It is also recommended commercial banks in Tanzania collect road transit charges and issue the coupons to transit transport operators. The designated bank should remit the collected revenue to an account designated by the Tanzanian government. A simple and robust system of collecting transit charges between the government and the private sector should be designed. The involvement of the private sector is important for ensuring that revenue collected from road users is used for road provision and maintenance. Since the Tanzanian government, like any other government, is keen to recover the road use costs from road users, it logically follows that road users have a vested interest in ensuring the revenue collected is used for its intended purpose.

The development of multimodal transport should be encouraged through harmonization and simplification of regulations, goods classification, procedure and documentation. This calls for improvement of the existing transport and communication facilities, harmonization of policies and establishment of new ones so as to facilitate and promote the movement of traffic in the country. For roads, emphasis should be on rehabilitation of existing roads and sequenced and prioritized implementation of new ones. For railways, emphasis should be on establishing and maintaining coordinated railway services and improvement of service delivery. The priority for maritime transport should be placed on improved cargo handling, easy access to port facilities by landlocked countries and improved communication systems. Harmonization and simplification

of rules, regulations and administrative procedures governing inland waterways transport is also necessary for the development of multimodal transport.

Finally, it is worth noting that there are no simple solutions that could be proposed to remedy the problem of poor or inadequate infrastructure in the country. Much will depend on the acceleration of economic growth to reach at lease six percent per annum and at the same time government must take action to improve the overall tax collection machinery, the collection and disbursement of cash from the RF, and business practices so that funds spent on infrastructure are efficiently utilized and managed — ensuring transparency of the government and the courts to reduce corruption and inform stakeholders on the criteria used in the allocation of funds and giving them some say on the utilization of RF revenues. Moreover, ratification of the Tripartite Agreement on Road Transport (April 1998) is necessary to facilitate road transport in the East African region.

APPENDICES

APPENDIX A. LIST OF TRUCK OPERATORS INTERVIEWED AND ROUTES PLIED

Name of Operator	Base Route	No. of Trucks
1. Halhenge Transport Company Ltd.	Moshi– Dar es Salaam Moshi– Tanga Moshi – Mombasa Moshi – Nairobi	6
2. Kilimanjaro Truck Company	Mombasa – Rwanda Dar es salaam – Burundi Dar es salaam – Rwanda Dar es salaam – Malawi and Zambia	15
3. Scandinavia Express Services	Dar es salaam – Rwanda Dar es salaam – Nairobi Dar es salaam – Kampala Dar es salaam – Malawi Dar es salaam – Zambia Dar es salaam – Burundi	26

Source: Interview with Truck Operators, 2000

APPENDIX B. LIST OF BUS OPERATORS INTERVIEWED AND ROUTES PLIED FROM DAR ES SALAAM

Name of Operator	Base Route	No of Buses
1. Abood	Morogoro	17
2. Tawfiq	Tanga/Nairobi	30
3. Tashrif	Tanga	11
4. Dar Express	Dar es Salaam/Moshi/Arusha	14
5. Shabibu	Dodoma	13
6. Islam	Morogoro	11
7. Taqabali	Shinyanga	3
8. Hood Bus Service	Morogoro	11
9. Satelite Bus Service	Tanga	9
10. Sadique Line	Morogoro	7
11. Tawakali Video Coach	Mbeya/Kyela	7
12. Tawakali International	Mbeya/Kyela	4
13. Scandinavia Bus Service	Dar es salaam/Mbeya/Arusha	16
14. Takrima	Mwanza/Mombasa/Malawi/Lusaka.	9
15. Taqwa	Mwanza/Mombasa/Malawi/Lusaka.	7
16. Rahaleo Bus Service	Tanga	6
17. Roral Coach	Moshi/Arusha	2
18. Msae	Moshi/Arusha	12
19. Safina	Iringa/Mbeya	3
20. Sayuni	Mbeya/Sumbawanga	3
21. Masia Tours Line	Mbeya	2
22. Solo Senior Co.	Mtwara	3
23. Mkwema Television	Moshi/Arusha	3
24. Baraka Video	Morogoro/Ifakana	2
25. Umba River	Tanga	2
26. Mwibaya	Tanga	1
27. Fresh ya shamba	Moshi/Arusha	5
28. Upendo	Iringa	3
29. Swabra	Handeni	4
30. Sai Baba Express	Moshi/Arusha/Lindi/Mtwara	5
31. Coach	Dodoma	3
32. Simbakasi Coach	Mbeya	2
33. Shukrani	Dodoma	2
34. Super Star Bus	Dodoma	2
35. Moro Best Bus	Morogoro/Ifakara	2
36. Born Coast Bus	Lindi/Mtwapa	6
37. Lupelo Bus Service	Iringa	4
38. Zafanana	Tanga	5
39. Bembea	Tanga	4
40. Ngorika	Moshi/Arusha	2
41. Tayasari Transport	Tanga	4
42. Confort Video Coach	Iringa	4
43. Mapande Bus Service	Moshi/Arusha	4
44. Sabaha Transport	Moshi/Arusha	5
45. Champion	Dodoma	7
46. Zakiras Bus Services	Lindi/Mtwara	5
47. Wifi Nae Video Coach	Lindi/Mtwara	3
48. Desert Safari	Tanga	2
49. Makete Transport	Njombe/Makete	2
50. Osaka Royal	Moshi/Arusha	2
51. M-Sleeping Coach	Mbeya	4

52. Master City	Moshi/Arusha	4
53. Zainab Bus Service	Iringa/Mbeya	10
54. Kilimanjaro Video Coach	Moshi/Arusha	3
55. Hekima	Mneya	4
56. Twiga Bus Service	Lindi/Mtwara	2
57. Amweye	Lindi/Mtwara	2
58. Shengena	Lindi/Mtwara	2
59. Safari Master	Lindi/Mtwara	1
60. Lambada	Lindi/Mtwara	3
61. Central Star	Lindi/Mtwara	4
62. Nazurani	Lindi/Mtwara	2
63. Jogoo la Bibi	Lindi/Mtwara	2
64. Butterfly	Lindi/Mtwara	4
65. Riamy	Lindi/Mtwara	2
66. JVC	Dodoma	3
67. SAS	Dodoma	4
68. Super Najmunisa	Dodoma	4
69. Amit	Mwanza	6
70. Mandela	Bukoba	2
71. Blue Ship	Mwanza	2
Total		365

Source: Ubungo Central Upcountry Bus Terminal Survey, November, 2000.

APPENDIX C. CARGO THROUGHPUT AT MAJOR PORTS, 1992-1999

Port	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
DAR ES SALAAM							
IMPORTS	3,721,225	3,130,725	3,393,560	3,073,447	2,964,083	3,217,702	3,420,527
EXPORTS	1,119,552	901,129	994,685	858,334	744,618	683,821	678,978
TOTAL	**4,840,777**	**4,031,854**	**4,388,245**	**3,931,781**	**3,708,701**	**3,901,523**	**4,099,505**
TANGA							
IMPORTS	81,485	55,596	42,151	28,396	36,093	68,362	94,362
EXPORTS	112,754	99,363	58,085	78,401	70,064	96,304	81,903
TOTAL	**194,239**	**154,959**	**100,236**	**106,797**	**106,157**	**164,666**	**176,265**
MTWARA							
IMPORTS	39,325	47,345	37,000	42,264	53,381	68,865	74,049
EXPORTS	56,634	47,790	57,926	64,355	63,609	92,519	111,083
TOTAL	**95,956**	**95,135**	**106,990**	**116,990**	**161,384**	**161,384**	**185,132**
GRAND TOTAL	**5,130,975**	**4,281,948**	**4,583,407**	**4,145,197**	**3,931,848**	**4,227,573**	**4,460,902**

Source: Tanzania Harbors Authority, Annual Report and Accounts, 1992/93- 1998/99.

APPENDIX D. COMPARISON OF COUNTRYWIDE DISTRIBUTION OF CARGO THROUGH DAR ES SALAAM PORT BETWEEN 1997 AND 1999

	TANZANIA		ZAMBIA		DRCBR		MALAWI		UGANDA		OTHERS	
	1998/99	1997/98	1998/99	1997/98	1998/99	1997/89	1998/99	1997/98	1998/99	1997/98	1998/99	1997/98
IMPORTS												
BREAK BULK	798,260	799,050	31,740	46,339	196,234	152,652	3,211	6,162	66,849	48,903	70,149	54,647
DRY BULK	320,309	178,977	16,544	24,463	906	5,619	60,317		4,937		-	
LIQUID BULK	1418950	1322039	353,268	484,320	641	-	66,021	94,531	4,191		-	6,071
TOTAL IMPORTS	**2537519**	**2300066**	**401552**	**555,122**	**205,781**	**158,271**	**129,549**	**100,693**	**75,977**	**48,903**	**70,149**	**60,718**
EXPORTS												
BREAK BULK	303,907	257,990	155,322	201,689	15,462	20,496	455	621	18,396	8,259	-	131
LIQUID BULK	185,433	199,636	-	-	-	-	-	-	-	-	-	-
TOTAL EXPORTS	**489,340**	**452,626**	**155,322**	**201,689**	**15,465**	**20,496**	**455**	**621**	**18,396**	**8,259**	**-**	**131**
GRAND TOTAL	**3026859**	**2752692**	**556,874**	**756,811**	**221,246**	**178,767**	**130,004**	**101,314**	**94,374**	**57,162**	**70,149**	**60,849**

Source: Tanzania Harbors Authority: Annual Report and Accounts1997-99.

APPENDIX E. BUS TRIP DAILY FREQUENCY PATTERN FROM DAR ES SALAAM TO MAJOR DESTINATIONS

Route	Number of Operators	Bus Frequency per Day
Dsm-Morogoro (200 kms)	Abood Bus Services (each has 2 trips)	22
	Islam Bus Services (2 trips)	16
	Zanils	
	Moro Best	2
	Sadiki Line	2
	Others (Hood,Baraka)	2
		44
Dsm – Tanga	Raha Leo	3
	Tayasari	2
	Bembea	2
	Sateline	3
	Tashrift	3
	Swabra	2
	Zafanana	2
	Others (5)	5
		20
Dsm – Tanga – Mombasa	Takrim	1
Dsm – Moshi – Rombo	Meridian	1
Dsm – Moshi – Arusha	Dar Express	4
	Fresh ya Shamba	2
	Shabaha Bus Services	2-3
	Msae Investment	4-5
	Scandinavia	2
	Others 10 operators	10
		24-26
Dsm-Moshi/Arusha-Nairobi	Hood Bus Service	1
	Tawfiq bus Services	1
	Taqwa Bus Services	1
	Takrima Bus Services	1
		3
Dsm-Nairobi-Mwanza	Tawfiq Bus Service	1
	Takrima Bus Services	1
		2
Dsm-Nairobi-Kampala Bukoba	Tawfiq Bus Services	2 x weekly
Dsm-Dodoma	Champion Video Coach	2-3
	Shabiby Video Line	4
	BM-One coach	2
	Super Star	2
	Others (4 other buses)	4
		14-15
Dsm-Dodoma-Singida	Tashriff	2
Dodoma-Shinyanga-Mwanza	SAS	3 x weekly
	Hood	1
Dsm-Songea	Sumar	1
	Others	1
		3

	Makete	1
Dsm-Iringa-Njombe	Hood	1
Morogoro-Arusha	Abood	1
	Islam	1
		3
	Confor	2
Dsm-Iringa	Others	3
		5
	Hood	2
Dsm-Iringa-Mbeya/Kyela	Tawakal International	4
	Zainabs	2
	Scandinavia	3
	Mwanahapa Sleeping Coach	2
	Others (3 operators)	3
		16
	Takrim	1
Dsm-Malawi		
Dsm-Mtwara-Lindi-Masasi-Newala-Nachingwea	23 bus operators operating on these routes	Average 10

Source: Ebbing Bus terminal Survey, 2000

APPENDIX F. BUS FARES SAMPLE LIST IN TANZANIA SHILLINGS

Dar es Salaam– Morogoro	2,000
Dar es Salaam– Arusha Ordinary Services Luxury Services	8,000 9,500-15,000-17,000
Dar es Salaam- Dodoma	5,000- 7,000
Dar es Salaam– Mwanza (via Nairobi)	26,000
Dar es Salaam– Nzega/Shinyanga	17,000
Dar es Salaam– Lusaka	35,000
Dar es Salaam– Nairobi	15,000
Dar es Salaam– Lilongwe/Malawi	62,000
Dar es Salaam- Bukoba via Dodoma-Singida	28,000
Dar es Salaam- Bukoba via Nairobi/Kampala	35,000
Dar es Salaam-Mbeya Ordinary Services Luxury Services	13,500 15,000
Dar es Salaam-Iringa	8,000

Source: Bus Terminal Survey, 2000

US $1 = Tshs. 850.00

APPENDIX G. EAC REGIONAL ROAD NETWORK FOR TANZANIA

Corridor	Road Link	Distance (km)	Coast(US$ millions)	Donor	Status
2	Dar es Salaam – Mlandizi	55	45	DANIDA	Construction progressing well, 40 km done, completion June 2001.
	Singida - Shelui	112	45	IDA	Study and design in final stage, consultant appointed to update them
	Shelui – Nzega	110	45	AFDB	Financing confirmed tendering for construction in progress.
	Muhutwe – Mutukula	112	33	AFDB	Civil works in progress.
	Kagoma – Muhutwe	20	6	OPEC	Preparation of tender document in progress
	Chalinze – Morogoro	100	40	DANIDA	Financing confirmed update of study and design in final stage
	Morogoro – Dodoma	265	45	EU	Waiting response from EU for funds request re-submitted.
	Dodoma – Singida	245	100	Nil	Funding is being sought
	Nzega – Isaka	170	85	EU	EU agreed to finance feasibility study update
	Isaka – Lusahunga	332	50	Nil	Funding is being sought
	Lusahunga – Kagoma	162	73	Nil	Funding is being sought
	Ndundu – Mingoyo	301	130	KUW/ OPRC/ SAUD	Feasibility study completed and forwarded to the Kuwait Fund.
3	Mwanza – Nyanguge	35	13	EU	Financing confirmed, tender floated in February 2000.
	Nyanguge – Musoma	186	19	EU	Financing not confirmed, waiting studies on economic viability.
	Biharomulo – Usagara	230	4	AFDB	Project funding request made, waiting response.
	Biharamulo – Usagara	230	81	Nil	EU declined commitment, donor being sought
4	Nyakanazi – Kasulu	242	6	AFDB	Request for funding to AFDB has been made.
	Kasulu – Sumbawanga	591	12	AFDB	Project funding request made, waiting response.
	Sumbawanga – Tunduma	228	105	IDA	World Bank to finance feasibility study.
	Mwandiga – Monyovu	94	45	Belgium	Tanzania to follow bilaterally
5	Tunduma – Songwe	70	35	NORAD	Financing approved, construction in progress
	Igawa – Iringa – Msimba (Kitonga)	70	35	Japan	Confirmation awaited.
	Dodoma–Babati–Minjingu	60	27	ITALY	No Confirmation
	Arusha – Namanga	105	40	NORAD/ AFDB	Final report on update of feasibility study submitted.
	Igawa – Iringa - Msimba	260	100	None	Donor required
	Iringa – Dodoma	270	122	None	Donor required.
	Dodoma – Minjingu	256	115	None	Donor required.

Source: EAC Secretariat, 2000

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